

UNIT PRICE CATALOG

1014 Catalog Entries

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REPLACEMENT SHEET**Location Factor:****Sales Tax:****@ Ave Sub Gen'l Conditions:**

System	Description	Base Unit Cost
col_sprnd_ftg	3000 PSI concrete forms, rebar, concr, placing, finish	\$291.00
sprnd_ftg	3000 PSI concrete Not Req'd (Trench Footing) 12" thick x 18" wide; forms, reinf, direct chute 12" thick x 24" wide; forms, reinf, direct chute (For Precast Foundations) 12" thick x 24" wide; 3/4" stone bedding	\$0.00 \$10.76 \$16.04 \$2.22
fdn_drain	PVC 4" dia; gravel drain bed PVC 6" dia; gravel drain bed	\$4.00 \$5.00
	4" high foundation:	
1	Poured-8"; bitum/damp; sill plates	\$25.60
2	Poured-10"; bitum/damp; sill plates	\$28.26
3	Poured-10"; brick ledge; bitum/damp; sill plates	\$32.04
4	Poured-12"; bitum/damp; sill plates	\$32.60
5	Poured-12"; brick ledge; bitum/damp; sill plates	\$36.38
6	Block-8", grouted; bitum/damp; parging; sill plates	\$42.68
7	Block-10", grouted; bitum/damp; parging; sill plates	\$50.44
8	Block-12", grouted; parging; bitum/damp; sill plates	\$58.20
9	Pre-Cast Wall System; 1" Rigid Insul (R-5), furring ribs; sill plates	\$40.63

FIGURE 2a

0.93

6.00%

Berrien City, MI

0%

MASTER [BASELINE] Resi-Cost™

Cost Adjustments

Adjusted Unit	Unit	Loc Fctr	S Tax	Sub GC
\$0.00	LF	0.93	3.00%	0%
\$10.31	LF	0.93	3.00%	0%
\$15.36	LF	0.93	3.00%	0%
\$2.13	LF	0.93	3.00%	0%
\$278.75	CY	0.93	3.00%	0%
\$0.00	LF	0.93	3.00%	0%
\$3.83	LF	0.93	3.00%	0%
\$4.79	LF	0.93	3.00%	0%
\$24.52	LF	0.93	3.00%	0%
\$27.07	LF	0.93	3.00%	0%
\$30.69	LF	0.93	3.00%	0%
\$31.23	LF	0.93	3.00%	0%
\$34.85	LF	0.93	3.00%	0%
\$40.88	LF	0.93	3.00%	0%
\$48.32	LF	0.93	3.00%	0%
\$55.75	LF	0.93	3.00%	0%
\$38.91	LF	0.93	3.00%	0%

REPLACEMENT SHEET

FIGURE 2b

ENERGY MODEL

MASTER [BASELINE] Resi-Cost™

Resi-Cost™ Managed

 TOTAL FINISHED AREA (TFA): 2,400 SF
 TOTAL CONSTRUCTED AREA: 4,764 SF

Berrien City, MI

3 Bedroom; 1 Full; 1 Half Baths

Enter:	State	Residential Energy Code	Comments
M	Michigan	Michigan Uniform Energy Code Part 10 Rules, less stringent than 1992 MEC	Prior to June 22, 1977, the state of Michigan had no building energy efficiency requirements. On July 27, 1985, the state adopted ANSI/ASHRAE/IES Standard 90A-1980 statewide. SB 719, signed in early January 1996, repealed the 1995 adoption of the 1993 MEC. The legislation directed the state construction code commission to, by April 1, 1997, provide cost-effective standards and establish a program to provide home buyers with energy rating information. The Michigan Uniform Energy Code Part 10 Rules were adopted March 31, 1999.

Envelope Heat Loss	Area (SF)	R-Value	U Factor	Delta T	Heat Loss (BTUH)
Heat Loss-Basement Walls-ENERGY STAR	1,479	15	0.07	22	2,169
Heat Loss-Basement Floor (or Ground Flr Slab)	1,500	25	0.04	22	1,320
Heat Loss-Walkout Wall	0	0	0.00	67	-
Heat Loss-Walls	1,751	10	0.10	67	11,970
Heat Loss-Walls (Supplemental)	0	0	0.00	67	-
Heat Loss-Windows (low-E) Default (R-3)	345	3	0.33	67	7,705
Heat Loss-Windows Standard Glazing (R-2)	0	2	0.50	67	-
Heat Loss-Windows (low-E) Triple Glaze (R-5)	0	6	0.17	67	-
Heat Loss-Doorwalls	0	3	0.33	67	-
Heat Loss-Doorwalls	0	3	0.33	67	-
Heat Loss-Doors	63	5	0.20	67	844
Heat Loss-Roof SIP (on Timber)	0	0	0.00	67	-
Heat Loss-Roof SIP (on SIP)	0	0	0.00	67	-
Heat Loss-Attic (Uninsulated Roof Rafters)	1,500	22	0.05	67	4,653
Heat Loss-Skylights	0	3	0.33	67	-
					Building Envelope Heat Loss 28,661 BTUH

FIGURE 5a

REPLACEMENT SHEET

REPLACEMENT SHEET

FIGURE 5b

5	ASHRAE 99% Design Dry Bulb Temp (deg F)
72	Indoor Design Temp (deg F)
67	Delta T
68,097 Total BTUH Demand	
1.4 Furnace Sizing Factor	
120,000 Furnace Size at 80%	
Meets Energy Star:	
106,000 Furnace Size at 90%	
102,000 Furnace Size at 94%	
96,000 Furnace Size at 100% (ELECTRIC)	

Envelope Tightness		1.00 ACH (Air Changes / Hour)	Design Occupancy: 4		
Select >	2 Tight Stick Built	CFM	ACH	Constant	Volume
Infiltration / Ventilation		545	1.00	1.08	32,700
Natural Infiltration		0	1.00	1.08	32,700
Mechanical Ventilation w/AAUX		108	Min Target CFM		
75% AAUX Efficiency					
Envelope + Infiltration Heat Loss =		68,097 BTUH	94%	3	<Select Furnace Efficiency
Furnace AFUE =					

D = Degree Days = <input type="text" value="6,235"/>	Berrien City, MI	< (per US Weather Service)
T = Temp diff =	67 degrees	
V = Fuel value =	1,052 BTUh per cu ft natural gas	
V = Fuel value =	91,743 BTUh per Gallon propane	
V = Fuel value =	3,413 BTUh per kWh electric	
CF1 =	1.36 Correction factor that includes the effects of rated full load efficiency, part load performance, over sizing and energy conservation devices.	
CF2 =	0.71 Empirical correction factor for heating effect versus 65 degrees F degrees-days.	

E = Annual Energy Consumption =	148,509 cu ft natural gas
	1,703 gallons of propane
	- kWh of electricity (100% Eff)

Annual Heating Cost =	\$1,351.43 NGAS
Annual Heating Cost =	\$2,656.57 PROPANE
Annual Heating Cost =	\$0.00 ELECTRIC

FIGURE 5C REPLACEMENT SHEET

HOME SPECIFIC QUALITY / COST SELECTIONS
SUBSYSTEMS AND CONSTRUCTION ASSEMBLY OPTIONS
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TOTAL FINISHED AREA: 2,400 SF
 TOTAL CONSTRUCTED AREA: 4,764 SF
 Berrien City, MI
 3 Bedroom; 1 Full; 1 Half Bath

SYSTEM	SUBSYSTEM	Selection CONSTRUCTION ASSEMBLY OPTIONS						BASELINE TOTAL \$	Savings
		quan	unit	unit \$	total \$	BASELINE TOTAL \$			
01 Foundation									
011.10 Spread footings (timber columns)	1	Not Used				0	NCOLS	\$64.53	\$0
011.10 Spread footings (lally columns)	2	12" thick-36"x36": forms, rebar, concrete	EA	\$92.92	\$372	\$0			
011.20 Spread footings (foundation walls)	4	12" thick x 24" wide; forms, reinf, direct chute	LF	\$15.36	\$1,659	\$0			
011.20 Spread footings (basement walls)	5	12" thick x 24" wide; forms, reinf, direct chute, PVC 6" gravel drainbed	LF	\$20.15	\$2,312	\$0			
011.30 Foundation Wall (4' High)	2	Poured-10": bitum/damp; sill plates	LF	\$27.07	\$4,061	\$0			
011.40 Excavation: Foundation Wall Footing	2	4' depth spread fg excav, sand/gravel; backfill	SF	\$0.56	\$483	\$0			
012 Special Foundations	1	No additional special foundations	SF	\$0.00	\$0	\$0			
02 Substructure									
021.00 Ground Floor Slab on Grade	3	Not Used				0	SF	\$0.00	\$0
021.00 Garage Floor Slab on Grade	2	5" slab w/4" gravel base; 6 mil vap; expand mat; W1.4W1.4; steel trowe	SF	\$3.11	\$2,690	\$0			
021.00 Basement Slab on Grade	3	4" slab w/4" gravel base; 6 mil vap; expand mat; W1.4W1.4; steel trowe	SF	\$2.82	\$4,224	\$0			
021.00 Crawlspace Floor	1	Not Used	SF	\$0.00	\$0	\$0			
021.10 Ground Floor Slab Insulation	1	Not Used	SF	\$0.00	\$0	\$0			
021.10 Basement Slab Insulation	1	Not Used	SF	\$0.00	\$0	\$0			
022 Excavation: Basement / Crawl	3	Walkout Sand & gravel excav, backfill, compaction 8" lifts; rough grade	CY	\$6.11	\$3,057	\$0			
022.00 Off Site Trucking	1	Assumes off-site hauling NOT required (Assumes on site placement of:	CY	\$0.00	\$0	\$0			
023 Basement Walls	2	Poured-10": bitum/damp; sill plates	BWA	\$7.11	\$7,823	\$0			
023.00 Exposed Basement Wall Framing	1	Not Used	BWA	\$0.00	\$0	\$0			
023.10 Basement Wall Insulation	4	3" rigid-25 PSI Compressive (R-15) ENERGY STAR COMPLIANT	BWA	\$1.39	\$1,528	\$0			

REPLACEMENT SHEET

FIGURE 6a

HOME SPECIFIC QUALITY / COST SELECTIONS		MASTER [BASELINE] Resi-Cost™		Master-Cost™ Managed	
SUBSYSTEMS AND CONSTRUCTION ASSEMBLY OPTIONS		TOTAL FINISHED AREA: 2,400 SF		Benten City, MI	
© 2002 Home-Cost.com 261 System Selections		TOTAL CONSTRUCTED AREA: 4,764 SF		3 Bedroom; 1 Full; 1 Half Baths	
SYSTEM	SUBSYSTEM	Selection	CONSTRUCTION ASSEMBLY OPTIONS	quant	unit \$
				total \$	total \$
				BASELINE	Savings
01 Foundation	011 Standard Foundations			0	\$0
	011.10 Spread footings (lally columns)	1	Not Used	NCOLS	\$64.53
	011.10 Spread footings (lally columns)	2	12" thick-36"x36"; forms, rebar, concrete	EA	\$92.92
	011.20 Spread footings (foundation walls)	4	12" thick x 24" wide, forms, reinf, directchute	LF	\$15.36
	011.20 Spread footings (basement walls)	5	12" thick x 24" wide, forms, reinf, directchute, PVC 6" gravel drainbed	LF	\$20.15
	011.30 Foundation Wall (4' high)	2	Poured-10'; bitum/damp; sill plates	LF	\$27.07
	011.40 Excavation: Foundation Wall Footing	2	4' depth spread flg. excav; sand/gravel; backfill	SF	\$0.56
	012 Special Foundations	1	No additional special foundations	SF	\$0.00
02 Substructure	021 Slab on Grade			0	\$0
	021.00 Ground Floor Slab on Grade	3	Not Used	SF	\$0.00
	021.00 Garage Floor Slab on Grade	2	5" slab w/4" gravel base; 6 mil vap; expan matt; W1.4/M1.4; steel trowe	SF	\$3.11
	021.00 Basement Slab on Grade	3	4" slab w/4" gravel base; 6 mil vap; expan matt; W1.4/M1.4; steel trowe	SF	\$2.82
	021.00 Crawlspace Floor	1	Not Used	SF	\$0.00
	021.10 Ground Floor Slab Insulation	1	Not Used	SF	\$0.00
	021.10 Basement Slab Insulation	1	Not Used	SF	\$0.00
	022 Excavation: Basement / Crawl	3	<ERROR> Must Select '1' or '2'-Full Basement Option	CY	<ERROR> #VALUE!
	022.00 Off-Site Trucking	1	Assumes off-site hauling NOT required (Assumes on site placement of:	CY	#VALUE!
	023 Basement Walls	2	Poured-10'; bitum/damp; sill plates	BWA	\$7.11
	023.00 Exposed Basement Wall Framing	1	Not Used	BWA	\$0.00
	023.10 Basement Wall Insulation	4	3" insqd-25 PSI Compressive (R-15) ENERGY STAR COMPLANT	BWA	\$1.39

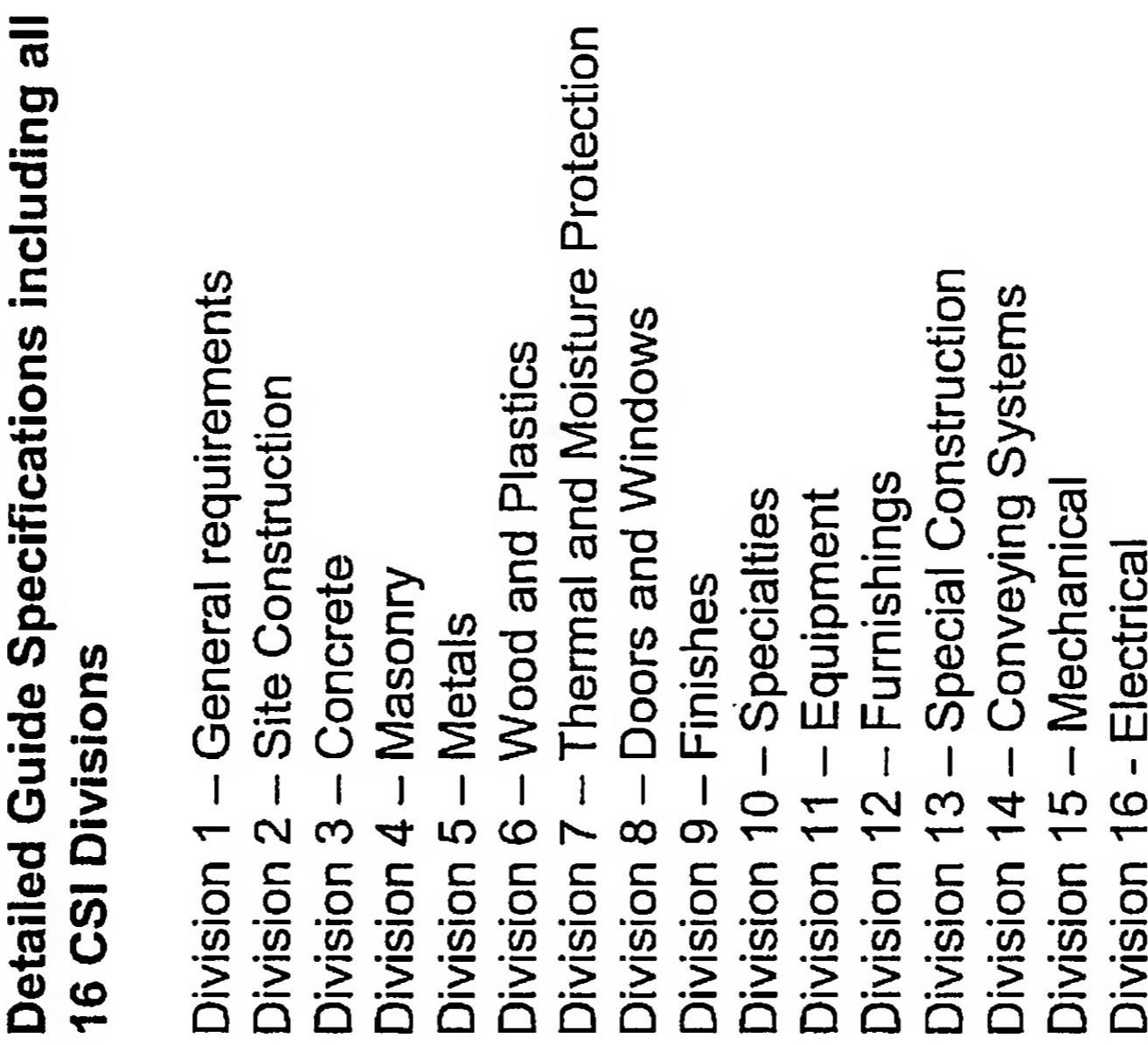
Alternate Selections illustrating self documenting line item changes to component costs and Self-Connecting feature (Line 022 Basement Excavation) wherein "ERROR" was triggered when "Walkout Basement" was deselected in '40' Design Characteristics, requiring selection of Full Basement excavation options.

FIGURE 6b
REPLACEMENT SHEET

**Residential Cost Estimation
Construction Summary
“Component Options”**

- **Control Document** that provides outline construction descriptions of the building systems selected by the Owner.
- **Serves a similar purpose as site and engineering drawings would provide** in that scope requirements are called out for site, structural, mechanical, electrical and plumbing systems.
- Controls which material options are to be selected in cases where options exist in the guide specification sections.

**Guide Specifications
CSI MASTERSPEC
Divisions 1-16**



REPLACEMENT SHEET

FIGURE 7